

ABSTRACT OF THE DISCLOSURE

In general, the present invention is directed to a method of using slurry waste composition to determine the amount of metal removed during chemical mechanical polishing processes, and a system for accomplishing same. In one embodiment, the method comprises providing a substrate having a metal layer formed thereabove, performing a chemical mechanical polishing process on the layer of metal in the presence of a polishing slurry, measuring at least a concentration of a material comprising the metal layer in the polishing slurry used during said polishing process after at least some of said polishing process has been performed, and determining a thickness of the layer of metal removed during the polishing process based upon at least the measured concentration of the material comprising the metal layer. In another embodiment, the present invention is directed to a system that is comprised of a chemical mechanical polishing tool for performing a chemical mechanical polishing process on a metal layer in the presence of a polishing slurry, a concentration monitor for measuring a concentration of a material comprising the metal layer in the polishing slurry after at least some of the polishing process has been performed, and a controller for receiving the measured concentration and determining a thickness of the layer of metal removed during the polishing process based upon at least the measured concentration of the material comprising the layer of metal.